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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,060	07/22/2003	Bryan B. Sauer	CL1833 US NA	8260

23906 7590 12/21/2005

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WILMINGTON, DE 19805

EXAMINER

GRAY, JILL M

ART UNIT PAPER NUMBER

1774

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,060

Applicant(s)

SAUER ET AL.

Examiner

Jill M. Gray

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 43-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 11-12, 44 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by PCT Publication WO 03/008680 A1 (Sen), for reasons of record.

Sen teaches a fiber comprising a segmented thermoplastic elastomeric polymer and an uncrosslinked olefinic thermoplastic elastomeric polymer, said olefinic thermoplastic elastomeric polymer being an ethylene copolymer such as ethylene/1-octane copolymer, per claims 1 and 11. In addition, Sen teaches that the copolymer is present in an amount within applicants' range as required by claim 12. See Example 2A. Also, Sen teaches that the thermoplastic elastomeric polymer can be of the type contemplated by applicants in claims 2-3, such as a poly(ether amide) or poly(ether ester). See page 7, lines 3-14. Sen also teaches the formation of fabrics and that a surfactant can be included as required by claims 44 and 47. See page 8, line 2 and page 19, line 1.

Therefore, the prior art teachings of Sen anticipate the invention as claimed in present claims 1-3, 11-12, 44 and 47.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 03/008680 A1 (Sen), as applied above to claims 1-3, 11-12, 44 and 47, in view of Bonte et al, 6,380,290 B1 (Bonte), for reasons of record.

Sen is as set forth above but does not teach the specific poly(ether ester). Bonte teaches segmented polyetheresters comprising polybutylene terephthalate and polytetramethylene oxide, per claim 5. See Experiment 1. It would have been obvious to use a poly(ether ester) of the type contemplated by applicants and as taught by Bonte with the reasonable expectation of obtaining a composition having improved thermooxidative stability. As to the amounts of claim 5, it is the examiner's position that since poly(ether esters) comprising polybutylene terephthalate and polytetramethylene oxide were known in the art, it was within the expected skills of one having ordinary skill in the art to arrive at the optimum proportion of those ingredients. As to claim 6, tetrahydrofuran is a known component in the polymerization of polymeric materials. It would have been obvious to incorporate this component in the polymer of Sen with the reasonable expectation of success of obtaining the efficacious properties associated therewith. Therefore, the teachings of Bonte would have rendered obvious the invention as claimed in present claims 4-6.

Claims 7-10 and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 03/008680 A1 (Sen), as applied above to

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claims 1-3, 11-12, 44 and 47, in view of PCT Publication WO 93/15251 (Gessner), for reasons of record.

Sen is as set forth above but does not teach the specific olefins of claims 7-9. Gessner teaches the formation of fabrics, garments and hygiene articles (claims 44-46) comprising filaments formed from thermoplastic elastomers such as propylene based polymers of the type contemplated by applicants in claims 7-10. See page 10. In addition, Gessner teaches that his articles have improved elastic recovery properties. It would have been obvious to modify the teachings of Sen by substituting his olefinic thermoplastic elastomer with the olefinic thermoplastic elastomer taught by Gessner with the reasonable expectation of success of obtaining articles having improved elastic recovery.

Therefore, the combined teachings of Sen and Gessner would have rendered obvious the invention as claimed in present claims 7-10 and 43-46.

Response to Arguments

1. Applicant's arguments filed October 4, 2005 have been fully considered but they are not persuasive.

Applicants argue that Sen discloses fibers having a side-by-side construction, sheath/core construction or an islands-in-the-sea configuration, all of which have co-continuous domains and, as a result, in the fibers of Sen, the two polymeric components or constituents are present as co-continuous domains, further arguing that the claimed fiber is therefore not a bicomponent or biconstituent fiber as described in Sen because it

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does not have any co-continuous domains whereas the present invention is present as a discontinuous domain rather than as a continuous domain.

In this regard, it is the examiner's position that applicants' characterization of biconstituent fibers having an island-in-the-sea construction is limited. In particular, fibers having an island-in-the-sea configuration include incompatible polymers wherein one polymer can be dispersed as fibrils (islands) in a matrix (sea) of the other polymer.

Applicants argue that Bonte discloses a segmented polyetherester copolymer composition having improved thermooxidative stability as imparted by a stabilizer of a selected combination of phenolic antioxidants and aromatic amines but does not disclose or suggest anything about blending this segmented polyetherester copolymer with an olefinic thermoplastic, elastomeric polymer or the use of this segmented polyetherester copolymer for the preparation of a fiber.

In this regard, Bonte is relied upon for all that he would have reasonably imparted to one of ordinary skill in the art at the time the invention was made, namely, that poly(ether esters) comprising polybutylene terephthalate and polytetramethylene were known in the art at the time the invention was made and, that it would have been obvious to use a poly(ether ester) of the type contemplated by applicant with the reasonable expectation of obtaining a composition having improved thermooxidative stability.

Applicants argue that nothing further is taught or suggested by Gessner about the structural nature of the filament that might be prepared from such blend of components and that Gessner does not teach or suggest that a fiber may be prepared

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in which an olefinic thermoplastic elastomeric polymer is dispersed in a matrix of a segmented thermoplastic, elastomeric polymer.

In this concern, Gessner is relied upon for all that he would have reasonably imparted to one of ordinary skill in the art, in particular, that it is known in the art to form fabric, garments and hygiene articles using thermoplastic elastomers and, further providing motivation to the skilled artisan to modify the teachings of Sen by using olefinic thermoplastic elastomers of the type contemplated by applicants with the reasonable expectation of success of obtaining articles having improved elastic recovery.

No claims are allowed.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In particular, Sullivan et al, 5,565,158 teaches island-in-the-sea fibers wherein fibrils are dispersed in a matrix.
3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

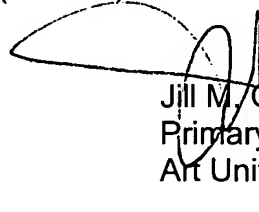
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Primary Examiner
Art Unit 1774

jmg